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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/084,890 | 02/27/2002 | Georges Marcel Victor Thielen | DN2001057 | 8170 |

7590

12/02/2003

The Goodyear Tire & Rubber Company
Patent & Trademark Department - D/823
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| EXAMINER |
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LEE, RIP A

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| ART UNIT | PAPER NUMBER |
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1713

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,890

Applicant(s)

VICTOR THIELEN ET AL.

Examiner

Rip A. Lee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Septmeber 11, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

This office action follows a response filed on September 11, 2003.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 942 042 to Colvin *et al.* for the same reasons set forth in the previous office action (Paper No. 3).

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colvin *et al.* in view of U.S. Patent No. 5,614,580 to Zanzig *et al.* or U.S. Patent No. 5,674,932 to Agostini *et al.* for the same reasons set forth in the previous office action.

Response to Arguments

5. Applicants traverse the rejection of claims 1-20 under 35 U.S.C. 103(a) as being unpatentable over EP 0 942 042 to Colvin *et al.* Applicant's arguments have been considered fully, but they are not persuasive.

As indicated previously, the key difference between the present invention and that of the prior art is the point of entry of ZnO vulcanizing accelerant. Applicants maintain that the skilled artisan would not have found it obvious to add ZnO in the productive stage, especially since the number of choices is infinite.

Colvin *et al.* states that final curatives including sulfur vulcanizing agents are typically mixed in the final, productive stage. The conclusion was drawn that one of ordinary skill in the art would find it obvious to add ZnO here because ZnO is a known vulcanizing accelerator. Therefore, it would be obvious to add vulcanizing accelerator concurrently with vulcanizing agent.

It is also maintained that the skilled artisan would find it obvious to arrive at the present invention because the number of choices of when to add ZnO is limited. That is, the skilled technician would find it obvious to add ZnO in the non-productive stage or the productive stage, or he may even add the accelerant in both stages. Applicants rebut stating that there are infinite combinations (1/2 productive and 1/2 non-productive, 1/3 productive and 2/3 non-productive, *ad infinitum*). This peculiar argument is nearly equivalent to stating that one may type with the left hand or the right hand, and if one were to use both hands, one could use two fingers from the left and three fingers from the right, or one finger from the left and four fingers from the right, *etc.*

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In the final analysis, there still remain three choices: use of the left hand, the right hand or both. Following the same line of reasoning, there remain three occurrences when one may introduce vulcanization accelerator: in the productive stage, in the non-productive stage, or in both stages. Contrary to Applicant's remarks, the rejection of record does not invoke a modification of the prior art. Rather, the thrust of the rejection is simply to fill in an obvious gap in an unrecited, but otherwise obvious process.

6. Applicants traverse the rejection of claims 1-20 under 35 U.S.C. 103(a) as being unpatentable over Colvin *et al.* Colvin *et al.* in view of U.S. Patent No. 5,614,580 to Zanzig *et al.* or U.S. Patent No. 5,674,932 to Agostini *et al.*

Applicants claim that none motivation exists to combine reference and that impermissible hindsight has been used to construct the subject matter of the present claims. However, there is no proof to Applicant's testament. The motivation to add ZnO into the composition already exists from the teachings of Colvin *et al.* (see Example 4), and it is a compelling one. The secondary references were cited to show that ZnO is added in the productive stage along with sulfur curative. In view of the teachings of both references, the skilled artisan would then find it quite obvious to add ZnO in the productive stage of ZnO, as per examples of Zanzig *et al.* or Agostini *et al.* The skilled artisan does not see where use of hindsight surfaces in making this obvious conclusion.

Applicants rely on references not relied upon to rebut Examiner's prima facie case of obviousness. Arguments based on these examples are not considered pertinent to the rejection of record. Furthermore, they do not detract from the fact that the cited references, namely Zanzig *et al.* and Agostini *et al.*, teach use of ZnO in the productive stage of elastomer production.

Applicants finally call attention to experimental results presented in the specification. It is maintained that the surprising result lies in the difference in MS/1.5 100 °C values. If there is some meritorious feature here, it can not be seen based on the data presented in the response. It is not clear how comparisons A vs. B, C vs. D, and E vs. F illustrate an unexpected result, and perhaps further elucidation is required. Furthermore, the specification examples cited by Applicant are not probative of nonobviousness inasmuch as the data do not provide a comparison with the closest prior art, *i.e.* Colvin *et al.*

In conclusion, since a *prima facie* case of obviousness has been established properly, and since the experimental data are insufficient to rebut a *prima facie* case of obviousness, the rejections of record have not been withdrawn.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Information Disclosure Statement

8. The information disclosure statement filed July 23, 2003 has been entered into the record. References EP 0 994 150 and EP 1 002 863, both to Materne *et al.* were cited in a European search report as "X" references.

The present invention is drawn to a process in which an elastomer containing 40-100 pw of multi-viscoelastic response rubber and 0-60 pw of another elastomer is compounded with coupling agent and filler in a non-productive mixing stage. It can be seen that one such MVR rubber is SBR having M_n of 50,000-150,000 and LS/RI ratio of 1.8 to 3.9. Both references teaches use of SBR, coupling agent and filler in a non-productive mixing stage. Yet, none discloses that the SBR is indeed a MVR rubber, as required in present claim 1. Moreover, the references do not disclose the number average molecular weight of the SBR component. Since this governs the physical properties of the rubber, the generic SBR of Materne *et al.* do not instantly qualify as MVR rubber. Taken as a whole, the subject matter of the present claims may be obvious in view of the full disclosure of Materne *et al.*, but the claims are not instantly anticipated by the cited prior art.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

ral

November 25, 2003



DAVID W. WU
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